Cancel claim 1 and substitute claims 24-44 as follows:

1   24.   A decoder for decoding an encoded digital signal,

2   wherein the encoded digital signal represents a wideband

3   digital signal having a sampling frequency F_s, and the encoded

4   digital signal comprises consecutive frames, each frame

5   comprising a plurality of information packets, each information

6   packet comprising N bits, N being larger than 1, a frame

7   comprising at least a first frame portion including syn-

8   chronization information; and wherein the decoder comprises:

9   an input for receiving the encoded digital signal,

10   means for converting the encoded digital signal into a

11   replica of the wideband digital signal, and

12   an output for supplying the replica of the wideband

13   digital signal,

14   characterized in that said converter is arranged for

15   converting a signal having a number of information packets in

16   one frame determined according to the formula

17

$$P = \frac{BR}{N} \times \frac{n_s}{F_s}$$

18

19   where BR is the bitrate of the encoded digital signal and n_s is

20   the number of samples of the wideband digital signal whose

21   corresponding information in the encoded digital signal is

22   included in one frame of the encoded digital signal, and

23   if P is an integer, the number of information packets

24   in one frame is P, and

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25   if P is not an integer, the number of information

26   packets in a number v of the frames is P', where P' is the

27   highest integer whose value is less than P; and the number of

28   information packets in a number w of the other frames is equal

29   to P'+1, the numbers v and w being selected such that the

30   average frame rate of the encoded digital signal is

31   substantially equal to F_s/n_s.

1   25. A decoder as claimed in claim 24, characterized in that

2   the first frame portion comprises further information

3   relating to the number of information packets in the frame, and

4   the decoder comprises retrieval means to retrieve said

5   further information from the first frame portion in said frame

6   upon reception of the encoded digital signal.

1   26. A decoder as claimed in claim 24, characterized in that F_s

2   = 48 kHz.

1   27. A decoder as claimed in claim 24, characterized in that N =

2   32.

1   28. A decoder as claimed in claim 24, characterized in that n_s

2   = 384.

1   29. A decoder as claimed in claim 24, characterized in that BR

2   = 384. bits/s

1   30. A decoder as claimed in claim 24, characterized in that the

2   first frame portion further includes system information, and

3   the decoder comprises retrieval means for retrieving said

4 system information from the first frame portion in said frame
5 upon reception of the encoded digital signal.

1 8. A decoder as claimed in claim 7, characterized in that the
2 system information relates to the bitrate BR.

1 9. A decoder as claimed in claim 7, characterized in that the
2 system information relates to the sampling frequency F_s.

1 10. A decoder as claimed in claim 7, characterized in that the
2 system information identifies a frame as having one information
3 packet more than other packets.

1 11. A decoder as claimed in claim 7, characterized in that
2   the system information identifies a transmission mode
3 for the digital signal, the system information identifying an
4 encoded digital signal comprising information relating to a
5 stereo audio signal, an encoded digital signal comprising
6 information relating to a mono audio signal, a bilingual
7 signal, or an intensity stereo encoded audio signal, and
8   the decoder comprises retrieval means for retrieving
9 the mode identification.

1 12. A decoder as claimed in claim 7, characterized in that
2   a frame comprises said first frame portion, a second
3 frame portion and a third frame portion,
4   the encoded digital signal further comprises
5 allocation information and samples of a plurality of quantized
6 subsignals, the allocation information indicating for said
7 plurality of quantized subsignals the number of bits

45

8   representing the samples of said quantized subsignals, the
9   allocation information being included in said second frame
10   portion and said samples being included in said third frame
11   portion of a frame, and

12   the decoder further comprises second retrieval means
13   for retrieving the allocation information from said second
14   frame portion, and third retrieval means for retrieving said
15   samples from said third frame portion.

1   36. A decoder as claimed in claim 35, characterized in that the
2   encoder further comprises synthesis filter means for
3   reconstructing a replica of the wide-band digital signal in
4   response to the quantized subsignals received, the synthesis
5   filter circuit combining the subsignals and applying
6   multiplication to form the signal band of the wide band signal.

1   37. A decoder as claimed in claim 35, characterized in that
2   the encoded digital signal further comprises scale
3   factor information relating to scale factors, a scale factor
4   being associated with at least one of the quantized subsignals
5   contained in the third frame portion, and the third frame
6   portion further including said scale factor information, and

7   the decoder further comprises third retrieval means
8   for retrieving the scale factor information from said third
9   frame portion and storage means for storing said scale factor
10   information.

1   38. A decoder as claimed in claim 37, characterized in that the
2   third retrieval means are means for retrieving 6-bit words from
3   the scale factor information, each 6-bit word representing a

4   scale factor for a quantized subsignal.

16.
1   39. A decoder as claimed in claim 12, characterized in that the
2   second retrieval means are means for retrieving 4-bit words as
3   the allocation information from said second frame portion, each
4   four bit word representing the number of bits with which the
5   samples of a quantized subsignal is represented.

17.
1   40. A decoder as claimed in claim 16, characterized in that
2   upon detection of a 4-bit word '0000' for a specific subsignal
3   by the second retrieval means, the third retrieval means are
4   inhibited to retrieve samples from the third frame portion for
5   said specific subsignal.

18.
1   41. A decoder as claimed in claim 16, characterized in that
2   upon detection of a 4-bit word '0000' for a specific subsignal
3   by the second retrieval means, the third retrieval means are
4   inhibited to retrieve a scale factor from the third frame
5   portion for said specific subsignal.

19.
1   42. A receiver for receiving an encoded digital signal and for
2   converting the encoded digital signal into a wideband digital
3   signal, comprising a decoder for decoding the encoded digital
4   signal,
5   wherein the encoded digital signal represents a
6   wideband digital signal having a sampling frequency F_s, and the
7   encoded digital signal comprises consecutive frames, each frame
8   comprising a plurality of information packets, each information
9   packet comprising N bits, N being larger than 1, a frame
10   comprising at least a first frame portion including syn-

11 chronization information,

12 and wherein the decoder comprises:

13 an input for receiving the encoded digital signal,

14 means for converting the encoded digital signal into a

15 replica of the wideband digital signal, and

16 an output for supplying the replica of the wideband

17 digital signal,

18 characterized in that said converter is arranged for

19 converting a signal having a number of information packets in

20 one frame determined according to the formula

21

$$P = \frac{BR}{N} \times \frac{n_s}{F_s}$$

22

23 where BR is the bitrate of the encoded digital signal and n_s is

24 the number of samples of the wideband digital signal whose

25 corresponding information in the encoded digital signal is

26 included in one frame of the encoded digital signal, and

27 if P is an integer, the number of information packets

28 in one frame is P, and

29 if P is not an integer, the number of information

30 packets in a number v of the frames is P', where P' is the

31 highest integer whose value is less than P; and the number of

32 information packets in a number w of the other frames is equal

33 to P'+1, the numbers v and w being selected such that the

34 average frame rate of the encoded digital signal is

35 substantially equal to F_s/n_s.

1 43. A receiver as claimed in claim 42, characterized in that

2 the receiver further comprises converter means for converting

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the transmission signal into the encoded digital signal, the

converter means having an output coupled to the input of the

decoder.

44. A receiver as claimed in claim 43, characterized in that
the receiver is arranged for reproducing the encoded digital
signal signal from a record carrier, and the receiver comprises
a reproducing unit, the reproducing unit having an output which
is coupled to an input of the converter means.